

WHAT IS CLAIMED IS:

- 1 1. A method comprising the steps of:
 - 2 activating a first color scheme on the
 - 3 monitor;
 - 4 responsive to the activating of the first
 - 5 color scheme, measuring a first color point of the
 - 6 monitor;
 - 7 storing the first color point within a memory
 - 8 associated with the monitor;
 - 9 activating a second color scheme on the
 - 10 monitor;
 - 11 responsive to the activating of the second
 - 12 color scheme, measuring a second color point of the
 - 13 monitor;
 - 14 storing the second color point within the
 - 15 memory associated with the monitor;
 - 16 activating a third color scheme on the
 - 17 monitor;
 - 18 responsive to the activating of the third
 - 19 color scheme, measuring a third color point of the
 - 20 monitor; and
 - 21 storing the third color point within the
 - 22 memory associated with the monitor.

1 2. The method of claim 1, wherein the step of
2 activating the first color scheme comprises the step of
3 displaying a full-intensity red;
4 wherein a green and a blue are displayed at
5 zero intensity.

1 3. The method of claim 2, wherein the step of
2 activating the second color scheme comprises the step
3 of displaying a full-intensity green;
4 wherein a red and a blue are displayed at
5 zero intensity.

1 4. The method of claim 3, wherein the step of
2 activating the third color scheme comprises the step of
3 displaying a full-intensity blue;
4 wherein a green and a red are displayed at
5 zero intensity.

1 5. The method of claim 1, further comprising the
2 steps of:
3 storing a serial number corresponding with
4 the monitor; and

5 associating the first color point with the
6 serial number;
7 wherein the stored first color point is
8 stored in association with the serial number.

1 6. The method of claim 1, further comprising the
2 steps of:
3 reading the first, second and third color
4 points from the memory;
5 generating an attenuation and mixing matrix
6 corresponding to the first, second and third color
7 points;
8 receiving an RGB value for a pixel;
9 generating a corrected RGB value for the
10 pixel by applying the attenuation and mixing matrix to
11 the received RGB value.

1 7. An apparatus for displaying color, the
2 apparatus comprising:

3 a color display device; and

4 a memory device connected with the color
5 display device, the memory device for storing a full-
6 intensity red color point, for storing a full-intensity
7 green color point, and for storing a full-intensity
8 blue color point;

9 wherein the full-intensity red color point
10 includes zero intensity blue and zero intensity green,
11 and wherein the full-intensity green color point
12 includes zero intensity red and zero intensity blue,
13 and wherein the full-intensity blue color point
14 includes zero intensity red and zero intensity green.

1 8. The apparatus of claim 7, wherein the color
2 display device and the memory device are proximately
3 located.

1 9. The apparatus of claim 8, further comprising
2 a processor connected to the memory device, the
3 processor for computing an attenuation and mixing
4 matrix corresponding to the stored full intensity red

5 color point, the stored full intensity green color
6 point, and the stored full intensity blue color point.

1 10. The apparatus of claim 8, wherein the
2 processor is located proximate the color display device
3 and the memory device.

1 11. A method comprising the steps of:
2 activating a first color scheme on the
3 monitor;
4 responsive to the activating of the first
5 color scheme, measuring a first color point of the
6 monitor;
7 activating a second color scheme on the
8 monitor;
9 responsive to the activating of the second
10 color scheme, measuring a second color point of the
11 monitor;
12 activating a third color scheme on the
13 monitor;
14 responsive to the activating of the third
15 color scheme, measuring a third color point of the
16 monitor;
17 generating an attenuation and mixing matrix
18 corresponding to the measured first, second, and third
19 color points; and
20 storing the attenuation and mixing matrix at
21 a storage device.

1 12. The method of claim 11, wherein the step of
2 activating the first color scheme comprises the step of
3 displaying a full-intensity red;
4 wherein a green and a blue are displayed at
5 zero intensity.

1 13. The method of claim 11, wherein the step of
2 activating the first color scheme comprises the step of
3 displaying a full-intensity green;
4 wherein a red and a blue are displayed at
5 zero intensity.

1 14. The method of claim 11, wherein the step of
2 activating the first color scheme comprises the step of
3 displaying a full-intensity blue;
4 wherein a green and a red are displayed at
5 zero intensity.

1 15. The method of claim 12 further comprising the
2 steps of:
3 storing a serial number at a monitor-attached
4 storage device, the serial number corresponding with
5 the monitor; and

6 associating the attenuation and mixing matrix
7 with the serial number;

8 wherein the attenuation and mixing matrix is
9 stored in association with the serial number.

1 16. The method of claim 11 further comprising the
2 steps of:

3 receiving an RGB value for a pixel;
4 generating a corrected RGB value by applying
5 the attenuation and mixing matrix to the received RGB
6 value.

1 17. The method of claim 16, further comprising the
2 steps of:

3 manually selecting the pixel for display in
4 corrected color; and

5 operating the monitor in accordance with the
6 corrected RGB value responsive to the pixel being
7 selected.

1 18. An apparatus for displaying color, the
2 apparatus comprising:

3 a display device; and

4 a memory device connected with the display
5 device, the memory device for storing an attenuation
6 and mixing matrix generated according to the color
7 characteristics of the display device.

1 19. The apparatus of claim 18, wherein the color
2 display device and the memory device are proximately
3 located.

1 20. The apparatus of claim 19, further comprising
2 a processor connected to the memory device, the
3 processor for applying the attenuation and mixing
4 matrix to received RGB values to compute corrected RGB
5 values.

1 21. The apparatus of claim 18, wherein the memory
2 device is a non-volatile memory.

1 22. The apparatus of claim 18, wherein
2 characteristics include red, green and blue color
3 points.

1 23. A method for operating a color correction
2 system, the method comprising the steps of:
3 reading a full-intensity red color point from
4 a memory associated with a monitor;
5 reading a full-intensity green color point
6 from the memory associated with the monitor;
7 reading a full-intensity blue color point
8 from the memory associated with the monitor;
9 computing an attenuation and mixing matrix
10 corresponding to the first color point, the second
11 color point and the third color point;
12 receiving an RGB value; and
13 applying the attenuation and mixing matrix to
14 the received RGB value to generate a corrected RGB
15 value.